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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,258

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Angelo Beati

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EXAMINER

PALABRICA, RICARDO J

ART UNIT

PAPER NUMBER

3663

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,258	Applicant(s) BEATI ET AL.	
	Examiner Rick Palabrica	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 16-22 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 16-22 and 24-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's 6/5/09 Response, which traversed the rejection of claims in the 3/9/09 Office action is acknowledged.

Applicant's arguments have been fully considered but they are not persuasive.

Response to Arguments

2. Applicant alleges that applied art, Gallacher, "fails to teach or disclose 'spacer grids for holding the fuel rods, wherein the grids are secured to the guide tubes.'" In an attempt to support of his allegation, applicant states that:

"Gallacher specifically states that '[i]n some designs, the spacer grid is free to move axially a small amount to accommodate minor changes in the axial length of the fuel rods during irradiation.'" Emphasis by applicant.

Based on the above passage, applicant then concludes:

"Sliding is permitted between the fuel rods 16 and the spacer grids 18 of Gallacher, and therefore sliding occurs also between guide tubes 14 and the repair grid 50." Underlining provided.

The examiner disagrees.

First, it is clear that applicant himself recognizes and admits that the spacer grid in Gallacher moves ONLY in some (i.e., not all) designs. Thus, there are other designs of the Gallacher fuel assembly wherein the spacer grid DOES NOT MOVE. For these other assembly designs where the spacer does not move, then no sliding occurs between guide tubes 14 and repair grid 50, as per the above conclusion of applicant.

Art Unit: 3663

Clearly, applicant is taking a special feature of moving spacer, which is limited to a small population (i.e., SOME) of Gallacher's assembly, and then improperly asserting that this special feature to all designs said assembly.

Second, applicant states in the specification:

"Also in conventional manner, the spacer grids 13 are secured to the guide tubes 11 and are distributed along the height of the rods 3". Underlining provided. See page 6, lines 20+.

Thus, applicant himself admits that it is unconventional for the guide tubes NOT to be secured to the grid. Therefore, the other design of the Gallacher fuel assembly where the spacer does not move is the more common or conventional, which design meets the claim limitation.

Based on the above, applicant's arguments against the applied art are unpersuasive because the applicant has not shown that the reference does not teach what the examiner has stated it discloses, nor, has applicant shown that the examiner's reasoning for applying the reference for the rejection of the claims is improper or invalid.

3. Applicant further traversed Gallacher on the ground that:

"the outer walls of the repair grid 50 of Gallacher cannot be secured to the guide tubes through the elements 38, 38', 44; [i]ndeed the guide tubes cannot be received within the cells formed inside these outer walls." Underlining provided.

The examiner disagrees.

First, the claims (e.g., claim 13) recite:

"at least one lattice forming device for reinforcing the support skeleton, the lattice reinforcing device disposed between two spacer grids and being secured to the guide tubes." Underlining provided.

The claim only recites that the lattice reinforcing device be secured to the guide tubes. Nowhere does the claim recite that the guide tubes be inserted or received by the reinforcing device.

The above-cited feature upon which the applicant relies is not recited in rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, if said unrecited feature is considered by the applicant to be critical to his invention, then such omission would amount to a gap between the essential elements. In this case, the claim(s) would be incomplete and would be rejected under 35 U.S.C. 112, second paragraph. See MPEP § 2172.01.

Second, the examiner has already demonstrated that Gallacher has a fuel element design wherein the guide tube is secured to the lattice reinforcing device (i.e., repair grid 50)

4. Applicant alleges that Gallacher does not meet the limitation of claim 17 because Gallacher's "grid 50 supports the fuel rods through springs."

The examiner disagrees.

First, claim 17 recites:

"wherein the lattice reinforcing device does not have an arrangement for holding nuclear fuel rods." Underlining provided.

The term, "arrangement", is not a structure but a "state or condition or mode of being arranged" (see Reference U). The "springs" in Gallacher is neither a state nor a

Art Unit: 3663

condition nor a mode. Thus, applicant's citation of "springs" as being an "arrangement" is misplaced.

Second, the limitation, "does not have an arrangement" is a negative limitation. Applicant does not define the structure of the "arrangement", and absent such definition, the examiner interprets the term broadly and reads it on any and all states, conditions, or modes for which the repair grid of Gallacher is not capable of holding nuclear fuel rods. An example of such state or condition is when the grid has been manufactured but not yet installed in the assembly, or when it has been installed but fretting of the rods due to flow vibration has resulted in large gaps between the grid cell and the outer diameter of the rods.

Note also that the limitation "for holding nuclear fuel rods" is NOT a structural limitation but a statement of intended or desired use. This clause, as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

The system in the cited reference is capable of being used in the same manner and for the intended or desired use as the claimed invention. Note that it is sufficient to show that said capability exists, which is the case for the cited reference.

If applicant is of the opinion that the limitation is not broad, then the claim would still be unpatentable for being vague, indefinite and incomplete, and its metes and bounds cannot be determined because absent a definition of the structure of the "arrangement", one cannot determine what structures are excluded by the negative limitation, "does not have an arrangement for holding nuclear fuel rods."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 13, 16, 17, 20-22, and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Gallacher (U.S. 5,625,657).

The reasons are the same as those stated in section 1 of the 3/9/09 Office action, as further clarified in sections 2-4 above, which reasons are herein incorporated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3663

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18, 19, 24, 25, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallacher.

The reasons are the same as those stated in section 2 of the 3/9/09 Office action, as further clarified in sections 2-4 above, which reasons are herein incorporated.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

Art Unit: 3663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rick Palabrica/
Primary Examiner, Art Unit 3663

August 14, 2009